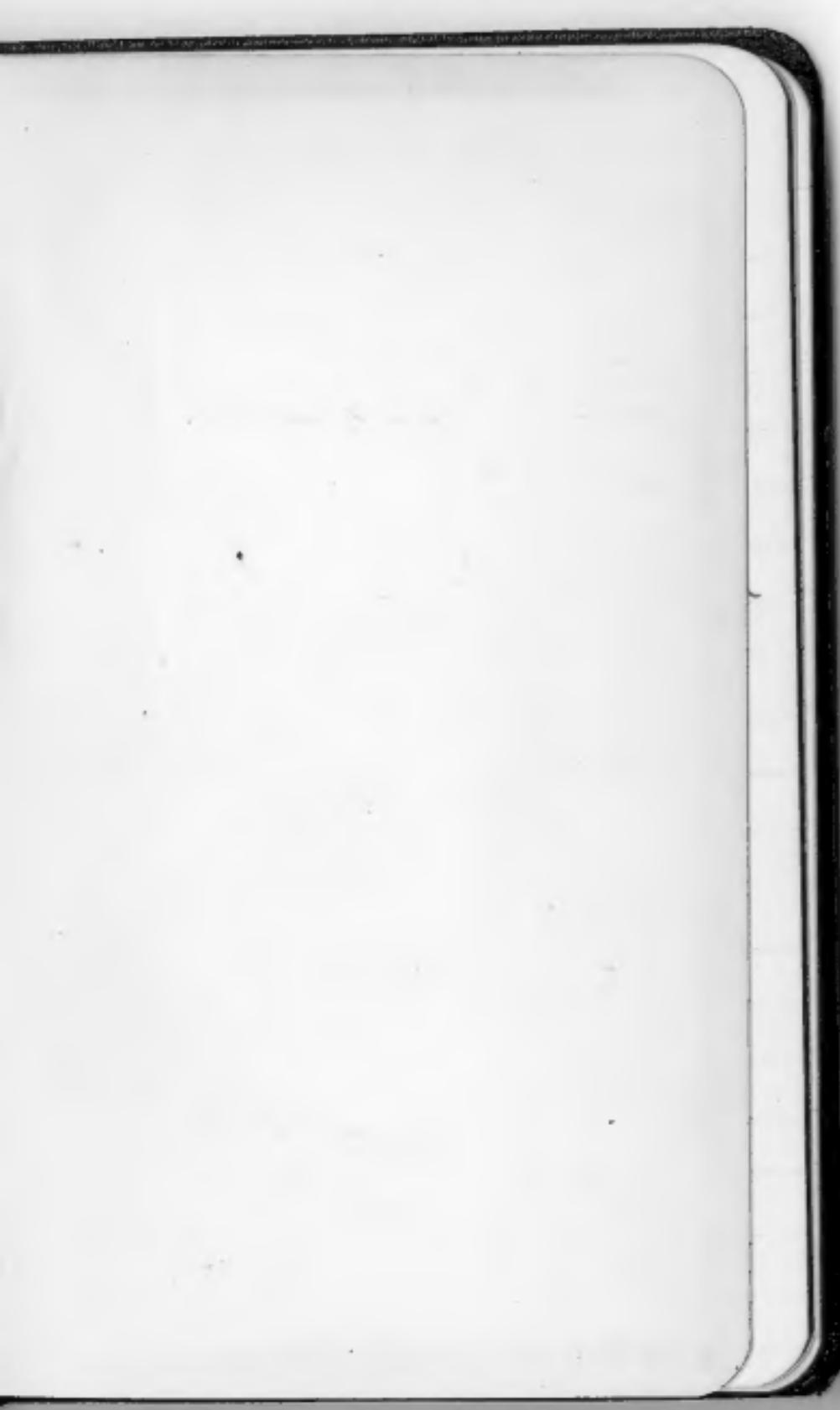
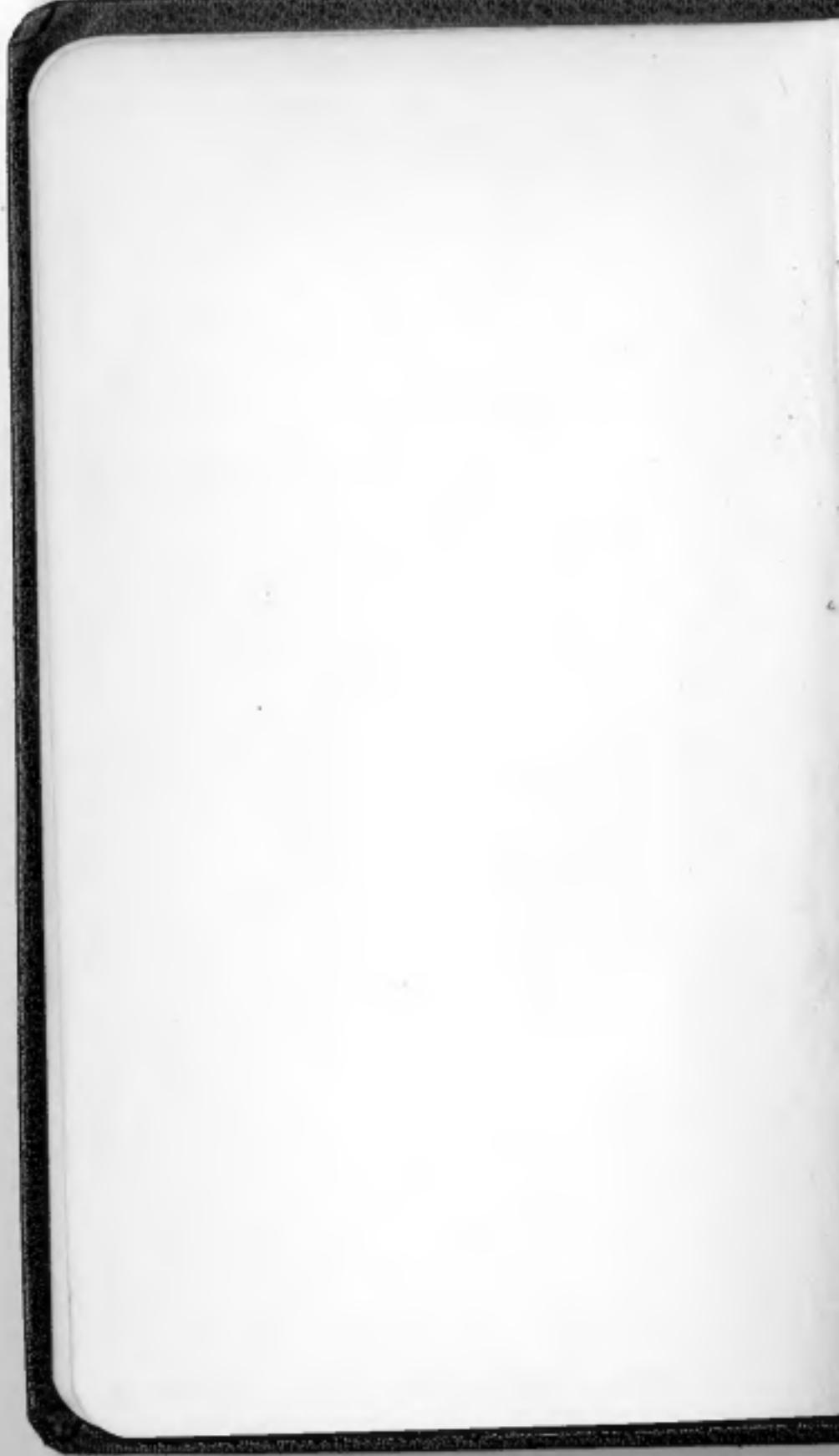


14739-15744

John Thomas Howell.





0
pet



June 16, 1939.

Skyline Blvd. 4 miles w. of
Burlingame on shale cut,
San Mateo Co.

14739. *Cirsium*

Perennial from rootstocks,
flowers white at first, becoming
eridid. Anthers lavender striped
at first. Flowers spreading in
anthesis.

Serpentine near San Andreas
Lake, San Mateo Co.

14740. *Cirsium*

Similar to preceding. The leaves
tomentose beneath and the roots
scariosus - marginated.

June 16, 1939.

Skyline Boulevard near Crystal
Springs Lake, San Mateo Co.

14741. *Cardenus*

Only 1 plant seen.

14742. *Eryngium armatum*

First brooklet n. of Causway
across Crystal Springs Lake on
Skyline Blvd. on east side of lake,
in Serpentine.

14743. *Cirsium fontinale*

Biennial. Biennial roots
commonly purplish-tinged. Flowers
spreading a little. Corolla white or
very faintly tinged with lavender.
Corolla the same or decidedly
lavender. - Heads nodding. Plants
widely branching, 3-4 ft. tall.

June 16, 1939.

14744. *Helenium puberulum*
Heads very small.

14745. *Verbena robusta*

14746. *Cirsium*

Growing in dry clay soil a couple
of yards from *C. fontinale*. In habit
very different - in this 10 stems
spread from a central point,
stout, about $2\frac{1}{2}$ ft. long. Flowers
spreading a little, corolla white
anthers pale lavender, the whole
becoming corded. The involucral
bracts green & larger than in
C. fontinale. Maybe hybrid between
C. fontinale & the type of *C.*
queretorum (?) common in the
vicinity. In this plant there was
nothing to indicate it a perennial.
Heads not nodding.

June 16, 1934.

Kings Mt., San Mateo Co.

14747. *Cicinium scabratum*

Biennial or winter annual. Outer flowers slightly spreading. Flowers rose-red.

14748. *Phacelia intercalata*

Corolla tubular at first, subcampanulate, the lobes turned in later, white at first.

14749. *Phacelia californica*

Not growing with spreading. Corolla narrowly campanulate, the lobes not spreading, pale lavender at first.

Skyline Blvd. near Saratoga Gap.

Santa Clara Co.

14750. *Ceanothus cordatus*

June 16, 1939.

var. nov.

14751. *Ceanothus cuneatus* dubius,
Shrub about 5-8 ft. tall with
arching branches. Foliage only a
little way above.

14752. *Eriogonum confertiflorum*

Skyline Blvd. near Saratoga Gap,
Santa Cruz Co.

14753. *Phacelia heterodoxa*
" " -

14754. *Rives Mergesii*

14755. *Franseria ~~intrebocata~~*
^{is sp. intrebocata}
India Tubular - compoundate,
white, the lobes turning in later.

14756. *Ceanothus cuneatus* dubius
Similar to 14751 but elongate
growing shoots prominent.

June 16, 1939.

Ben Lomond sand hills,

Santa Cruz Co.

14757. *Carex globosa*

14758. *Carex brevicaulis*

14759. *Acetosella hypoleuca*

14760. *Scutellaria tuberosa*

14760. *Erythronium tentifolium*

14761. *Nephelium hispidum?*

14762. *Luzula diffusa*

14763. *Mandella subserata*

14764. *Silene verucunda*

14765. *Cicinium occidentale*

Flowers rd, straight, not spreading.

14766. *Ceanothus cuneatus* dubius
when well developed, a broad
much-branched shrub, as broad or
broader than tall, up to 10 ft. tall.
Grazing with *Pinus ponderosa*, *P. attenuata*,
Aesculus californica, *Acacia*
constricta, *Eriogonum*
eriocephalum. Ben Lomond, Santa Cruz
Co. June 16, 1939.

Near Mud Lake n. of Bolinas,
Marin Co. June 18, 1939.

14767. *Corethrodryas californica*

14768. *Eriogonum canescens*

14769. *Stephanotis*

14770. *Eriodictyon*

14771. *Gnaphalium californicum*

June 18, 1939.

Near Mud Lake n. of Bolinas,
Marin Co.

14772. *Lupinus rivularis*,
flowers lavender-blue. Low
shubby plant about 2 ft. tall.

14773. *Angelica Tomentosa*

14774. *Cirsium heterophyllum*
Stems from underground rootstock.
Flowers white at first, spreading a
little.

14775. *Allocarya*

14776. *Soliva davalliae*

14777. *Modia*

14778. *Grindelia robusta*

June 18, 1939.

14779. *Lupinus Chamissonis*
Flowers dark purplish-blue. Shubby
plant about 2 ft. tall.

14780. *Festuca rubra*

14781. *Agricola magellanica*

14782. *Agrostis diegoensis*

14783. *Cordyline*

14784. *Ribes divaricatum*

14785. *Polygonum betaceum*

14786. *Kohleria cristata*

14787. *Lupinus formosus*
Stems low & spreading. Flowers dark
purplish-blue

Campus, Univ. of California, Berkeley.

June 20, 1939.

14788. *Crepis bursifolia*

Common on site of old Harmon Gym.

14789. *Cotula australis*

Unusually villous aspect.

Ridge n. of Mill Valley Station
near Miss Eastwood's old place,

Marin Co. June 25, 1939.

14790. *Cirsium occidentale* var?

Flowers spreading some, lilac in
color. Growing on partially shaded
bank in stony soil.

14791. *Mnandella*

14792. *Lupinus formosus*

Culms lavender-blue, early becoming
solid.

June 25, 1939.

14793. *Rumex polycarpus*

14794. *Eriogonum thomae*

14795. *Cirsium revolutum* ^{odontolepis} var.

Outer bracts broad & spiny-margined.
Type!

14796. *Cirsium revolutum* ^{geminatum} ×

Bracts with much narrower margin
that is scarcely spiny.

14797. *Cirsium revolutum* ^{geminatum} × ~

Bracts entire and spine-tipped

^{geminatum}

14798. *Cirsium revolutum* ×

Bracts shaped like those of preceding
but somewhat spiny-margined.

14799. *Cirsium ambiguum* (Ait.)

Some bracts broad, some bracts slender,
some entire, some spiny-toothed!

June 25, 1939.

The thistles that have just been listed are growing near each other along the east slope of the ridge north of Mill Valley Station just below the beginning of the chaparral belt on Mt. Tamalpais. They are not far from the old property owned formerly by Miss Eastwood, on which place variants corresponding to those collected were seen. No. 14795 resembles the type of C. revolutifolium var. odontolepis Petiak & No. 14799 approaches the type of C. amblylepis Petiak. Acc. to the label they came from "Mt. Tamalpais" but Miss Eastwood has told me that C. amblylepis grew on her place ad it may be that that is the type locality. — All the forms grew from rootstocks & had

June 25, 1939.

solid white to ~~buff~~^{buff} flowers which spread a little in the head.

14800. *Cirsium occidentale* var.?

Flowers rosy-red, spreading a little in anthesis. Plants with tap-root.

14801. *Cirsium occidentale* × *grevillei*

This may be a hybrid between the preceding (which is like the much widespread "*C. occidentale*" of the south side of Mt. Sanalpia) and the *C. grevillei* type of which no. 14797 is a representative in this neighbourhood. The root is apparently that of a biennial. The flowers are solid - buff or - whitish.

14802. *Chrysopsis* Benth.

14803. *Synphacelops*.

June 25, 1939.

Ridge n. of Mill Valley Station,
Marin Co.

14804. *Brosimum geniculatum*.
The commonest weedy roadside
mustard at this season.

South side of Mt. Tamalpais above
Cascade Canyon, Marin Co.

14805. *Phalaris minor*

14806. *Lupinus fallax*

14807. *Rubus parviflora*

14808. *Monardella*

14809. *Modia*
glandular scirpus with small
of black walnuts.

June 25, 1939.

wet place near West Point,
Mt. Tamalpais, Marin Co.

14810. *Agrostis* sp.

Ayala Flat, Mt. Tamalpais

14811. *Cicuta californica*

Cascade Canyon, Mill Valley.

14812. *Polygonum avicinatum*
Stems erect, or the lowest ones
spreading a little or prostrate.

14813. *Polygonum avicinatum* (?)
Borders of El Monte salt marsh, Marin
Co. July 2, 1939. Stems all prostrate,
herbage more or less glaucous blue-grey.
Stamens 8; achenes with roughings
more or less aligned longitudinally.

July 2, 1939.

14814. *Polygonum avicinæ* var. *rectum*

First stem erect, the lowest
branches spreading or procumbent,
bulbs yellowish-green. Stems
8. Culms markedly striate.
With spreading.

14815. *Eriogonum latijulis* . . .

Hills sw. of Almonte, Marin Co.

14816. *Ciclostaphylos*

With spreading. — — —

Elk Valley, Marin Co.

14817. *Hypericum ascyronoides*

14818. *Cirsium Andrewsii*

Evidently biennial, very robust,
up to 6 ft. tall, the main stem up
to 3 in. in diameter, the large
plants much-branched from near

July 2, 1939.

base. Flowers spreading, corolla
rosy-purple, anthers rosy-lavender.

14819. *Cirsium greciotoren*

Stems from perennial crown.
Flowers mid-whitish, anthers
lavender-striped.

14820. *Mimulus* _____

14821. *Epilobium franciscanum*

14822. *Epilobium adercolon*

14823. *Glyceria leptostachya*

In wet spring place with pseudig.

14824. *Horkelia californica*

Common on bushy slopes forming
low herbaceous clumps.

14824A. *Wubleya capitocea*
Stem & lvs. lightly glaucous

July 2, 1939.

Ridge between Tennessee Cove
& Pirates Cove, Marin Co.

14825. *Euonymus latifolius*

14826. *Castilleja*

Floral bracts yellow to coral.

14827. *Gnaphalium californicum*

Stems and leaves glandular &
odorous, no tmentum.

14828. *Gnaphalium californicum* -

Stems & leaves tomentose, no
glands present.

14829. *Gnaphalium californicum*

Stems arachnoid-tomentose,
the leaves glandular above and
thickly tomentose. - May be a hybrid
between two preceding.

July 2, 1939.

14830. *Grindelia hirsutula*.

Rays 28, 29, 38.

14831. *Chrysopsis Bolanderi*.

14832. *Lupinus rivularis*

Common, 2-4 ft. tall, generally,
2½ ft. tall.

Pirates Cove, Marin Co.

14833. *Helenium puberulum*

14833A. *Hedleya caespitosa*

Ivs. glabrous, inflorescences a little glaucous.

Between Pirates Cove & Big Lagoon,
Marin Co.

14834. *Grindelia suberosa*

Rays 25, 34, 32.

14835. *Anaphalis margaritacea*
var. *occidentalis*

14836. *Mandella*

July 2, 1939.

Between Big Lagoon and
Muir Woods, Marin Co.

14837. Minuartia

14838. Comes californica

14839. Juniperus xiphioidea

14840. Modia

Herbage not bad smelling, somewhat like black-walnut.

14841. Eriogonum f. var. n.

Stems glabrous.

14842. Epilobium californicum

Just south of Muir Woods,
Marin Co.

14843. Hypericum perforatum
Two small patches.

14844.

Only 1 plant seen.

14845. *Silenea* *Hawaii*

Forming a small patch.

Mill Valley, Marin Co.

July 2, 1939.

14846. *Brassica gemmifera*

Stems 6-8 ft. tall.

Azalea Flat, Mt. Tamalpais,

July 16, 1939.

14847. *Horkelia Michx.*

14848. *Juncus xiphoides*

14849. *Juncus effusus*

Nra Trail, Mt. Tamalpais. July 16-1939

14850. *Scrophularia*
Plant 10 ft. tall!

Rock Spring, Mt. Tawalpois.

July 16, 1939.

14851. *Juniperus phoenicea* var.
penicillata

14852. *Juniperus Covillei*

14853. *Juniperus Bolañei*

Between Mt. Theater + Bodjock,
Mt. Tawalpois, July 16, 1939.

14854. *Grindelia* ~~minima~~
Rays 29 in 1 head

Summit of Scott Mts. on road n. of
Carville, Trinity Co. July 31, 1939.

14855. *Rubus parviflorus*

14856. *Gentiana calycosa*

14857. *Rosa pisocarpa*.

north side of Scott Mts. on road to
Collaghan, Siskiyou Co. July 31, 1939.

14858. *Pyrrocoma* - *Aplopappus*
racemosus var. *pinifolius* (Kieck, Howell)
Scott Valley near Ft. Jones,
Siskiyou Co. July 31, 1939.

14859. *Ceanothus cuneatus*

Spirit Lake, Marble Mts.,
Siskiyou Co. Aug. 2, 1939.

14860. *Helenium Hoopesiae*

14861. *Castilleja miniata*

14862. *Polygonum minimum*

14863. *Heuchera Merriami*

14864. *Pentstemon Berryi*

14865. *Garrya Fremontii*

Aug. 2, 1939.

Spirit Lake, Marble Mts.,
Siskiyou Co.

, 14866. *Spraguea umbellata* f.

, 14867. *Crepis acuminata* .

, 14868. *Epilobium alpinum*

14869. *Eriogonum compositum*

, 14870. *Saxifrage Bryophora*

14871. *Vaccinium membranaceum*

14872. *Lutkea pectinata*

14873. *Anemone drummondii* ?

14874. *Pellaea breweri* .

14875. *Angelica tenuipes*

Aug. 2, 1939.

14876. *Ribes Maraballii*

14877. *Aster foliosus* var.

14878. *Aster - Eucypholus*
glabrosus.

14879. *Eriogonum salsuginosum*

14880. *Quercus vaccinifolia*

14881. *Quercus Sadleriana*

14882. *Phacelia* ?
Corolla campanulate.

14883. *Erysimum capitatum*

14884. *Holodiscus discolor*

14885. *Eriogonum elatum*

Aug. 2, 1939. . .

Spirit Lake, Marble Mt.,

Siskiyou Co.

14886. *Gayophyllum nemorosum*

14887. *Eriogonum umbellatum*

14888. *Ligusticum Horrellii*

14889. *Eriogonum nudum*

14890. *Euophyllum laevatum*
var. *integifolium*

14891. *Streptanthus tortuosus*

14892. *Isoetes Bolanderi*.

Submerged aquatic.

14893. *Eupatorium occidentale*

14894. *Eriogonum monatue*

Aug. 2, 1939.

14895. *Hieracium albiflorum*.

14896. *Tritillaria atropurpurea*

14897. *Polygonum flavescens*

14898. *Gilia aggregata*

14899. *Penstemon agnus*.

14900. *Picea*

14901. *Penstemon angustifolius*

14902. *Polygonum densum*

14903. *Potentilla Breweri*

14904. *Antennaria racemosa*

14905. *Gormania obtusata*

Aug. 2, 1939.

Spirit Lake, Marble Mts.,
Sierra Co.

14906. *Potentilla Drummondii*

14907. *Carex Prellii*

14908. *Carex stramineiformis*.

14909. *Artemisia latifolia*

14910. *Artemisia latifolia*

14911. *Leptotaenia dissecta*

14912. *Poa gracillima*

14913. *Arabis secunda* ·

14914. *Lomatium macrocarpum*

14915. *Sanicula septentrionalis*

Aug. 2, 1939.

14916. *Arenaria congesta*.
14916a. *Arenaria capillaris*.
14917. *Anica*

14918. *Dianthus gratianopolitanus* Bruneii

14919. *Avalanchier alnifolia*

14920. *Hieracium Bobcockii*

14921. *Pyrola secunda*

14922. *Lisetum conspersum*?

14923. *Ribes*

14924. *Osmorrhiza nuda*

14925. *Symphoricarpos mollis*

14926. *Osmorrhiza occidentalis*

Aug. 2, 1939.

Spirit Lake, Marble Mts.,
Siskiyou Co.

14927. *Anemone deltoides*

14928. *Lonicera conjugialis*

14929. *Sidalcea oregana*

14930. *Bromus carinatus*.

14931. *Potentilla gracilis*

14932. *Bromus Sukedsdorffii?*

14933. *Morandella odoratissima*

14934. *Carex abrupta*.

14935. *Aira elongata*.

14936. *Carex Hoodii*

Aug. 2, 1939.

14937. *Rubus parviflora*

14938. *Elymus glaucescens*.

14939. *Polygonum longissimum*

14940. *Potentilla glandulosa*

14941. *Arabis suffruticosa*.

14942. *Calamagrostis koelerioides*

14943. *Agrostis diegoensis*.

14944. *Gayophytum lasiospermum*

14945. *Arabis Hymenoides*.

14946. *Gilia capitata*

14947. *Symporicarpus mollis*

Aug. 3, 1939.

Spirit Lake, Marble Mts.,
Siskiyou Co.

14948. *Allium validum*

14949. *Lilium nevadense*

14950. *Hedcathion Jeffreji.*

14951. *Pedicularis racemosa*

14952. *Arabis retrofracta*

14953. *Melica subulata*

14954. *Lewisia Cotyledon*

14955. *Gommania obtusata*

14956. *Alnus sinuata*

14957. *Actaea arguta*

Aug. 3, 1939.

14958. *Ribes brunnescens*

14959. *Veronica alpina* var.
malosaeformis

14960. *Carex Kelloggii*

14961. *Epilobium brevistylum*

14962. *Carex abrupta*.

14963. *Carex leptopoda* (Luekku)

14964. *Carex laevigata*.

14965. *Mitchella pentandra*

14966. *Stellaria crispa*.

14967. *Viola blanda*

14968. *Carex aboluta*

Aug. 3, 1939.

Spirit Lake, Siskiyou Co.,
Marble Mts.

14969. *Stachys rigida*

14970. *Galium triflorum*

14971. *Silene campanulata* var.
Greenei.

14972. *Silene campanulata* var. *Greenei*.
Parts cinnereous - pubescent.

14973. *Chelone monosora*

14974. *Tellima grandiflora*

14975. *Filix fragilis*

14976. *Polygonum alpinum*

14977. *Mitella trifida*

Aug. 3, 1939.

14978. *Comus strobifera*
14979. *Sorbus californica*
14980. *Hackelia floribunda*
14981. *Camassia Gaudneri*
14982. *Circaea pacifica*
14983. *Kelloggia galoides*
14984. *Juncus ensifolius*
14985. *Schoenolirion album*.
14986. *Prunus emarginata*
14987. *Bostrychia major*
14988. *Athyrium filix-femina*

Aug. 3, 1939.

Spirit Lake, Marble Mts.,
Siskiyou Co.

14989. *Carex leptopoda*.

14990. *Saxifrage fragarioides*

14991. *Polyptilum lachnites*.

14992. *Streptopus amplexifolius*

14993. *Cardamine lyallii*

14994. *Mimulus moschatus*.

14995. *Chelidonium gescellina*

14996. *Cephaelis androsaemifolium*
var. *prunilum*

14997. *Mimulus nephrotivus*
leptoleus

14998. *Antostaphyllos nevadensis*

Aug. 3, 1939.

14999. *Troxera speciosa*

15000. *Lugula paviflora*.

15001. *Agrostis Humboldtana*.

15002. *Carex integrifolia*

15003. *Heschampsia atropurpurea*

15004. *Carex abrupta*.

15005. *Juncus confusus*.

15006. *Cryptogamma acrosticoides*

15007. *Carex brevipes*

15008. *Carex Brainerdii*

15009. *Juncus Parryi*.

Aug. 3, 1939.

Spirit Lake, Marble Mts.,
Siskiyou Co.

15010. *Pedicularis bracteosa*

15011. *Sambucus racemosa*

15012. *Montia asarifolia*

15013. *Smilacina amplexicaulis*

15014. *Habenaria leucostachys*

15015. *Clintonia uniflora*

15016. *Ceanothus velutinus*

15017. *Valeriana anomala* n. sp.

15018. *Veratrum viride*

15019. *Phacelia procera*

Aug. 3, 1939.

15020. *Tillium rivale*

15021. *Arctostaphylos patula* var

15022. *Aquilegia formosa*

15023. *Senecio trigonophyllus*

15024. *Senecio trigonophyllus*

Involucres fleshy - thickened at base; achenes larger than in preceding.

15025. *Castilleja pruinosa*.

15026. *Castilleja globosa*

Inflorescence less cinnereous and more glandular.

Aug. 4, 1939.

Between Elk Mt. and Marble Rim,
Marble Mts., Siskiyou Co.
(Marble Rim is escarpment south of
Rainey Valley.)

15027. *Chenopodium albuminervis*.

15028. *Achimenes fasciculata*
Apparently on *Eriogonum umbellatum*.

15029. *Prunus emarginata*
Lvs. unusually broad.

15030. *Agoseris plebeia*
Ligules bronzy.

15031. *Lupinus shastensis*
Fls. lavender at first, very
quickly turning brown.

15032. *Lupinus shastensis*

Aug. 4, 1939.

15033. *Cirsium*

Plants seeming to be perennial from deep-seated tap-root. Fls. corolla whitish.

15034. *Orthocarpus Copelandii*.

15035. *Polygonum sparganioides*

15036. *Rosa gymnocarpa*.

Marble Rim se. cirque of Rainey Valley, Marble Mts., Siskiyou Co.

15037. *Castilleja pectinata*?

15038. *Draba pterosperma*

15039. *Lepidium lepidium* var.
antulus.

15040. *Morandella odoratissima*

Aug. 4, 1939.

Marble Rim, Marble Mt.,
Siskiyou Co.

15041. *Crepis acuminata*.

15042. *Phocelia* (?)

Distinctly perennial, forming broad leafy mats or cushions from which flowering stems arise. The mats may be as much as 2 ft. across. Fls. corolla - whitish, open - compoundate.

15043. *Castilleja schizotricha*.

Inflorsscece lavender-tinged.

15044. *Buckellia grandiflora*

Numerous stems from perennial base.

15045. *Aster - Machaeranthera erodiata*

Aug. 4, 1939.

15046. *Campanula rotundifolia*
15047. *Gilia congesta*.
15048. *Arabis concava*?
15049. *Chrysopsis villosa*
15050. *Sedum stenopetalum*
15051. *Prunus demissa*
15052. *Eryngium Blommei*
15053. *Diagnella occidentalis*
15054. *Artemisia arbuscula*.
15055. *Kobresia Pusshii*

Aug. 4, 1939.

Near Spirit Lake on trail between
Spirit Lake + Elk Mt., Marble Mts.,
Siskiyou Co.

15056. *Pachystima myrsinites*

15057. *Ribes Lobbii*

15058. *Castilleja exserta* Eastw. n. sp.
The deep rich red + green of the
inflorescence very striking.

15059. *Castilleja mucronata angustifolia*
^{n. var.}
Leaves narrow, inflorescence
orange-red.

15060. *Castilleja mucronata* n. sp.
Leaves broader.

15061. *Castilleja mucronata armeniaca*
^{n. var.}
Intermediate between 15058 +
15059.

Aug. 5, 1939.

Spirit Lake, Marble Mts.,
Siskiyou Co.

15062. *Montia parvifolia*

15063. *Juncus Montanus*

15064. *Radicula sinuata*

15065. *Viola (blanda) Macloskeyi*.

15066. *Corex multicostata*

15067. *Bromus Lindsdorffii?*

15068. *Chinaphila umbellata*

15069. *Acer globrum*

I examined hundreds of specimens in the higher Marbles ad not one carried fruit. In middle part of canyon of Canyon Creek 1 specimen with fruit was seen.

Aug. 5, 1939.

Spirit Lake, Marble Mts.,
Siskiyou Co.

15070. *Stenanthium occidentale*.

Perianth-segments yellowish-green, maroon on margin.

15071. *Glyceria elata*

15072. *Sambucus glauca*

15073. *Pyrola picta*

a. weymoreum Griseb. var.

15074. *Acnitum* [] Wm.

Bulblet-bearing in axils. Some plants produce no flowers - only bulblets.

15075. *Delphinium glaucum*

1:

15076. *Monthonia americana*.

Aug. 5, 1939.

15077. *Salix commutata* ♂
var. *pubescens*

15078. *Salix commutata* ♀
var. *pubescens*

15079. *Salix Coulteri* ♂

15080. *Salix Coulteri* ♀

15081. *Salix Sitchensis*.

15082. *Carex microptera* (L.) Schku

15083. *Hypericum anomalloides*

15084. *Corallorrhiza maculata*

15085. *Corallorrhiza Mertensiana*

15086. *Corallorrhiza*
Sepals brownish, each spurred, alternating with 3 almost similar petals,

the lip slightly broader than
the two laterals, all the petal
rosy-purple with white tip.

The sepals tending to be erect, the
petals spreading.

Spirit Lake, Marble Mts.,

Siskiyou Co. Aug. 6, 1939.

15087. *Stipa occidentalis*

15088. *Arabis glabra*

15089. *Chionophila Menziesii*

15090. *Wedekather Jeffreysi*.

15091. *Herculum lanatum*

15092. *Agastache urticifolia*

15093. *Cibollea lanosa*.

Aug. 6, 1939.

15094. *Cinna latifolia*.
15094A. *Polygonum Houghtalain*
Elk Peak, Marble Mts.,
Siskiyou Co.
15095. *Stipa Setigeroides*.
15096. *Boschniakia strobilacea*
15097. *Hieracium Blandum*.
15098. *Amelanchier alnifolia*
15099. *Corex Brainerdii*
15100. *Chelone grisea*
15101. *Eryngium Breueri*.
15102. *Hieracium albiflorum*.
Flowers seem to be pale but
all are faded.
15102A. *Salix Scouleriana*

Aug. 6, 1939.

Near top of Elk Peak, Marble Mts.,
Sierra Co.

15103. *Silene grayi*.

15104. *Liuia hypoleuca* var.
californica

15105. *Chrysothamnus nauseosus*
occidentalis.

15106. *Holodiscus discolor* var.

15107. *Sitanum Hystrix*.

15108. *Carex stramineiformis*.

15109. *Vaccinium Myrtillus*

15110. *Phacelia* ?
Perennial hairy tufted mts.

15111. *Phyllodoce*
Bogotica empetrifolia

Aug. 7, 1939.

Sky High Valley, Marble Mts.,

Siskiyou Co.

15112. *Cirsium*

15113. *Lupinus elongatus*.

15114. *Lilium nevadense*

15115. *Lupinus alastensis*.

15116. *Carex Preslii*

15117. *Carum Howellii*

15118. *Juncus Howellii*

15119. *Carex nevina*

15120. *Carex ablates*

15121. *Carex integrifolia*

Aug. 7, 1939.

Sky High Valley, Marble Mts.,
Siskiyou Co.

15122. *Sidalcea oregana*.

15123. *Aconitum Japonicum*

15124. *Orthocarpus Copelandii*.

15125. *Salix commutata*

15126. *Honthomia intermedia*

15127. *Carex gymnoclada*

15128. *Carex kelloggii*

15129. *Juncus ensifolius*

15130. *Scirpus engelmii*

15131. *Salix commutata*
var. *densata*

♂

15132 A. *Salix commutata* demudata
15132. *Salix commutata* var. ?
demudata .
15133. *Aster adscendens* .

15134. *Aster Mongolicus* ?
Plant cinereous - puberulent.

15135. *Senecio trigomophyllus* .

Between Sky High Valley + Marble
Valley, Marble Mts., Siskiyou Co.
Aug. 8, 1939.
15136. *Lathyrus Vicia americana*

15137. *Aruncus sylvester*

15138. *Eupatorium occidentale*

15139. *Carex "astrostachys"*
15140. *Hakelia fusca*.
15141. *Gompharia obtusa*
15142. *Sedum Pungyi*.

Aug. 8, 1939.

Lower eastern slopes of Black
Mt., Marble Mts., Siskiyou Co.

15143. *Mimulus guttatus*

15144. *Habenaria malacophylloides*

15145. *Gentiana* ~

15146. *Artemisia ludoviciana*

15147. *Artemisia heterophylla*

15148. *Lupinus phootensis*

15149. *Saxifraga*

15149A. *Carex stramineiformis*

Subalpine slopes & ridges of Black
Mt., Marble Mts., Siskiyou Co.

15150. *Senecio triagnophyllus*

15151. *Coreopsis spectabilis*

Aug. 8, 1939.

15152. *Hieracium gracile* var.
deteriorum.

15153. *Aquilegia formosa*
Stems sticky-gummy.

15154. *Juncus nevadensis*

15155. *Carex abrupta*.

15156. *Phocelia* n. sp. (in part)
Perennial.

15157. *Carex Prostii*

15158. *Senecio tremontii*

15159. *Castilleja globosa* Eastw.
n. sp.

15160. *Utricularia pterosperma*

15161. *Ranunculus Eschscholtzii*

Aug. 8, 1939.

Subalpine slopes + ridges of Black
Mt., Marble Mt., Siskiyou Co.

15162. *Valeriana anomala*

Crosses pale pink or white.

15163. *Erythronium* *sibiricum*.

15164. *Solidago* *corpulenta*

15165. *Anemone multifida*

15166. *Pinus Balfouriana*

15167. *Actinidia arbuscula*

15168. *Silene Grayi*

15168A. *Silene longicollis monantha*

15169. *Eryngium umbellatum*

15170. *Leptosiphon occidentalis*

15170A. *Sedum stenopetalum*

Aug. 8, 1939.

15171. *Arenaria propinqua*.

15172. *Potentilla fruticosa*

15173. *Golium hypoleucum*

15174. *Arabis retrofracta*?

15175. *Eryngium Bloxmeri*

15176. *Geum triflorum*.

15177. *Artemisia borealis*

15178. *Arabis suffruticosa*.

15179. *Arnica diversifolia*

15180. *Epilobium anagallidifolium*

15181. *Arabis Breueri*. " "

Aug. 8, 1939.

Subalpine slopes & ridges of Block
Mt., Marble Mt., Susquehanna Co.

15182. *Castilleja schizotricha*

15183. *Antennaria alpina*

15184. *Pentstemon procumbens*

15185. *Castilleja arachnoidea*.
Inflorescence yellowish, corolla
cavary-yellow.

15186. *Asteriscus incompta*
(a. discolor off.)

15187. *Agoseris alpestris*

15188. *Agoseris glauca* var.
laciniosa

15189. *Carex spectabilis*

15190. *Carex abrupta*.

Aug. 9, 1939.

Sky High Valley, Marble Mts.,
Siskiyou Co.

15191. *Carex exscata*.

15192. *Carex abrupta*.

15193. *Arabis drummondii*

15194. *Isoetes bolanderi*

Amphibious

15195. *Potamogeton heterophyllus*

15196. *Potamogeton Robbinsii*

15197. *Carex rostrata*.

15198. *Ligusticum grayi*

15199. *Triisetum canescens*.

Aug. 9, 1939.

Sky High Valley, Marble Mt.,
Siskiyou Co.

15200. *Festuca elatior*

15201. *Trofolium longipes*

15202. *Phacelia* ~~intercepta~~ ^{sp.}
~~lanceolata~~

15203. *Carex Resin*

15204. *Glyceria evata*

15205. *Agrostis exarata*.

15206. *Salix lasiandra Abramsi*.

15207. *Modia Bolanderi*

15208. *Sparganium angustifolium*

15209. *Populus tremuloides*

Aug. 9, 1939.

15210. *Agrostis diegoensis*.

15211. *Muhlenbergia filiformis*.

15212. *Elymus aristatus*?

15213. *Agrostis diegoensis*.

15214. *Agrostis exarata*

15215. *Gayophytum laiospernum*

15216. *Gayophytum Nuttallii*

15216 A. *Gayophytum Nuttallii* var. *Abramae*

15217. *Solidago elongata*

15218. *Poa Bolanderi*.

15219. *Carex straminiformis*

Aug. 9, 1939.

Ridge south of Marble Valley,
Marble Mts., Siskiyou Co.

15220. *Polemonium pulcherrimum*

15221. *Castilleja arachnoidea*.

15222. *Descouainia incisa*

15223. *Tifolium pratense*

15224. *Phleum pratense*.

15225. *Holodiscum Fendleri*

15226. *Carex spectabilis*

15227. *Athyrium americanum*

15228. *Luzula parviflora*.

15229. *Hedychmopsis atropurpurea*

Aug. 9, 1939.

15230. *Potentilla flabellifolia*

15231. *Carex multicostata*

15232. *Carex spectabilis*

15233. *Phacelia integrifolia*

Shackelford Creek Trail near
Marble Valley, Marble Mts.

15234. *Solanum Xanthocarpum*

15235. *Vicia americana*

15236. *Hayardia Wherryi* var.

15237. *Epilobium parvifolium*

15238. *Rhamnus Purshiana*

15239. *Collomia tinctoria*

Aug. 9, 1939.

Shackelford Creek Trail near

Marble Valley, Marble Mts.,

Siskiyou Co. Aug. 9, 1939.

15240. *Testacea idahoensis*

15241. *Hentzia integrifolia* var.
californica

15242. *Stipa Lemmonii*.

15243. *Corynium androsaemifolium*
var. *primum*

15244. *Epilobium angustifolium*

15245. *Collomia grandiflora*

15246. *Aster rodulimus*.

15247. *Gilia capitata*

15248. *Agyrieis retrorsa*

Aug. 10, 1939.

Sky High Valley, Marble Mt.,
Saskiyon Co.

15249. *Hroba Howellii*

15250. *Agrostis exarata*.

15251. *Dactes Bolanderi*.

Submerged aquatic

15252. *Circa latifolia*.

15253. *Oxyria digyna*

15254. *Gnophalium palustre*

15255. *Aster glabratus* (*Eucyphalus*)

15256. *Armenia sylvester*

15257. *Mimulus primuloides*

Aug. 10, 1939.

Sky High Valley, Marble Mts.,
Siskiyou Co.

15258. *Gilia capillaris*.

15259. *Mimulus rubellus*

15260. *Gaultheria bifolia*

15261. *Epilobium Pringleanum*

15262. *Mimulus maculatus*

15263. *Poa leptocoma*?

15264. *Potentilla flabellifolia*

15265. *Hedcothem alpinum*

15266. *Phyllodoce empetriformis*

15267. *Vaccinium membranaceum*

Aug. 10, 1939.

15268. *Romneya sitchensis*

15269. *Potentilla*

15270. *Mimulus liliagineus*
Herbage silvery.

15271. *Hydrophyllum Fendleri*

15272. *Actaea arguta*

15273. *Bartsia orthoceras*

15274. *Rhodiola rosea*

15275. *Tellima grandiflora*
Petals greenish-white

15276. *Caltha biflora*

15277. *Polygonum bistortoides*

Aug. 10, 1939.

Sky High Valley, Marble Mt.,
Siskiyou Co.

15278. *Aquilegia formosa*

15279. *Hackelia floribunda* 1

15280. *Mimulus luteus*

15281. *Carex gymnoclocha*

15282. *Carex*

15283. *Phacelia procera*

cotyledon solid tan.

15284. *Veratrum californicum*

Between *V. viride* & *V. viride* there
were no hybrids seen at Sky High.
But in vicinity of Big Elk Lake
individuals were seen which I
suspect of hybrid origin.

grindstone Camp, Canyon Creek Canyon,
Marble Mt., Siskiyou Co. Aug. 10, 1939.

15285. *Ribes Cobbii*

Near mouth of Canyon Creek,
Siskiyou Co. Aug. 11, 1939.

15286. *Ribes Roegelianum* var. *cuneatum*

Scott River Canyon near mouth
of Canyon Creek, Siskiyou Co.
Aug. 11, 1939.

15287. *Endyonthus pilosus* var.
Blanda

15288. *Galium Blanda* form?

15289. *Galium pubens*

This and preceding growing within
few feet of each other

Sulphur Works, Mt. Rose area,
Shasta Co. Aug. 12, 1939.

115290. *Phacelia* sp. ?
Corolla campanulate, pale bluish-
lavender.

115291. *Oxytropis hirsutissima*

115292. *Panicum thermale*

115293. *Rumex utahensis*
Third Creek, 8500 ft., near
Mt. Rose, Washoe Co., Nevada
Aug. 13, 1939.

115294. *Cirsium* - cf. *utahense*
Flowers very pale pink at
first.

115295. *Ribes lasianthum*

115296. *Macrorhiza suffruticosa*.

Echo Summit on road to
Pleasantville, Eldorado Co.

Aug. 13, 1939.

15297. *Chenopodium albuminervis*

15298. *Rumex triangulivalvis*

Near Strawberry on road to
Pleasantville, Eldorado Co.

Aug. 13, 1939.

15299. *Phacelia heterodoxa*
Cotyledon tubular, pale lavender.

Riverton, Eldorado Co. Aug. 13, 1939.

15300. *Phacelia heterodoxa* (?)
Cotyledon smooth whitish, closed-
tubular in anthesis.

15301. *Lupinus albicaulis*
Flowers pink-lavender at
first. Bushy plants ca 2 ft. tall.

Open clay hills 8 miles from
Folsom on road to Placerville,
El Dorado Co. (near Sacramento
Co. line). Aug. 13, 1939.

15302. *Lesqenia novae*

The low grey-white plants with
massive flowers make a
delicate but rather ^{prominent} colorful
plant association on gentle
slopes surrounded by dried
grassland.

15303. *Aristida oligantha*.
with preceding but - low places.
Trees seen in vicinity of
Spirit Lake, Marble Mts.

Abies magnifica - common

Abies concolor - rare

Tsuga Mertensiana - common

Pinus monticola - not common

Pinus ponderosa - rare on S. slope

Liquidambar decurrens - " " "

Picea Breviflora - occasional.

At Sky High Valley, *Juniperus communis* and *Populus trichocarpa* were rare but not collected.

Mr. John F. Williams says that *P. albicans* + *P. Murrayana* are rare eastward toward Shuckeford Creek. Also some scattered individuals of *Pinus Balfouriana* which was seen + collected around Black Mt.

In the canyon of Canyon Creek there is a magnificent forest of Transition zone trees. In addition to the usual *P. ponderosa* *P. lambertiana*, *Lobreaea decurrens* and ^{and} *Pseudotsuga taxifolia*, + *abies concolor*, there was *Taxus brevifolia* + among the broad-leaved trees *Amelanchier alnifolia*, *Ostrya* *Kelloggii* + *chrysophlebia*, *Arbutus menziesii*, *Alnus rubra folia*, *Cornus Nuttallii*.

Aug. 27, 1939.

Near station, Ross, Marin Co.

15304. *Rumex solieri* Greene
Stems low & spreading.

15305. *Rumex Saccifolius*
Stems low and spreading.

15306. *Lapsana communis*

15307. *Medicago sativa*

15308. *Atriplex hastata*

15309. *Chenopodium ambrosioides*
sp. chilensis
To 4 ft. tall. Odorous.

15310. *Chenopodium ambrosioides*
^{album.}
subsp. *chilensis*

15311. *Digitaria sanguinalis*

Aug. 27, 1939.

On creek in Ross Valley, Marin Co.

15312. *Lemna*

Fronds large and very flat.
Bright yellowish-green.

Strand of Phoenix Lake, Marin Co.

15313. *Juncus*

15314. *Juncus phaeocarpus* var.
— *prisculus*

15315. *Elatioris macrostachya*

15316. *Polygonum monspeliacum*

15317. *Polygonum perfoliatum*
Also in springy places.

Submerged or floating, Phoenix Lake.

15318. *Potamogeton pectinatus*

15319. *Potamogeton nodosus*.

Aug. 27, 1939.

Dry slopes near Phoenix Lake,
Marin Co.

15320. *Cercocarpus betuloides*

15321. *Stephanomeria comosa* ...

Between Phoenix Lake and
Lake Lagunitas on Fish grade,
Marin Co.

15322. *Quercus dumosa*

Two plants, one shrubby, the
other arboreal ad about 10 ft. tall.

15323. *Hedleya lessonii*

On exposed rocks. Rosettes globose.

Strand of Lake Lagunitas, Marin Co.

15324. *Euphorbia serpyllifolia*

15325. *Eleocharis*

15326. *Ilyanthes angustifolia*

15327. *Cypripedium luteum*

Logunitas Meadows, Marin Co.

15328. *Navarretia*

Upper part of Corte Madera Ridge,
Marin Co. Aug. 27, 1939.

15329. *Symphoricarpos*
Low trailing shrub.

Corte Madera Salt marshes,
Marin Co. Sept. 3, 1939.

15330. *Grindelia paniculata*

15331. *Spartina leucophylla*

15332. *Chrysopsis oregona*
Along railroad fill, introduced?

Sept. 3, 1939.

Near Hamilton Field, Marin Co.
15333. *Trichostema*

Ignacio, Marin Co.

15334. *Bassia hyssopifolia*

Black Point, Marin Co.

15335. *Cistus illyricus corsicus*
Naturalized on wooded slopes.

Near Black Point on road to
Novato, Marin Co.

15336. *Hemizonia cymbosa*

15337. *Polygonum leptophyllum*

Near Novato, Marin Co.

15338. *Amaranthus gracilizans*.
Erect, 1-2 ft. tall.

15339. *Amaranthus blitoides*
nearly prostrate

Sept. 3, 1939.

15340. *Amaranthus retroflexus*

15341. *Amaranthus hybridus*

15342. *Centaurea calcitrapa*.
Erect, 2-3 ft.

15343. *Echinochloa crus-galli*.

San Antonio Creek at Marin-Sonoma
Co. line n. of Novato, Marin Co.

15344. *Sorghum halepense*

15345. *Chenopodium album*

15346. *Watsonia*

15347. *Salix Hendersonii*

15348. *Mentha*

Sept. 3, 1939.

San Antonio Creek at Marin -
Sonoma Co. line north of Novato,
Marin Co.

15349. *Rosa*

15350. *Nicotiana*

15351. *Amaranthus blitoides*
Stems prostrate.

15352. *Amaranthus californicus*
Stems suberect in some small
plants, mostly prostrate. In sand
of creek-bed.

15353. *Euphorbia seppiiifolia*

Salt marsh at mouth of San
Antonio Creek, Marin Co.

15354. *Achillea borealis*
spp. *californica*.

New
Burdell
Station

Sept. 3, 1939.

15355. *Cuscuta subincisa* D. & H.
Parasitic on *Gnidelia humilis*.

15356. *Cuscuta salina*
Parasitic on *Juncus canescens*

15357. *Rosa*
Slope above San Antonio creek
near preceding. Flowers very
fragrant.

San Rafael, Marin Co.

15358. *Amaranthus deflexus* L.

Stinson Beach, Sept. 10, 1939.

15359. *Cicuta Douglasii*
Margin of brackish marsh.

15360. *Urtica holosericea*

15361. *Eriogonum nudum*

Lake Lagunitas, Marin Co.

Oct. 1, 1939.

15362. Juvenis phaeocephalus

15363. Callitricha Bolander?

15364. Ammannia cornuta

15365. Juvenis xiphiondes

Rocky bed of inlet to Lake Lagunitas,
Marin Co. Oct. 1, 1939.

15366. Hologenia filipes

15367. Carex Gardneri.

Phoenix Lake, Marin Co.

Oct. 1, 1939

15368. Scirpus californicus

Pt. San Pedros, San Mateo Co.

Oct. 8, 1939.

15369. *Staphanomeria* - *Ptiloria*
conica?

Strand of Alpine Lake, Marin Co.

Oct. 15, 1939.

15370. *Plantago*

15371. *Mollugo verticillata*

15372. *Rodgersia ciliolata*

15373. *Amaranthus californicus*

15374. *Amaranthus californicus*.

Legunitos Creek below Alpine Dam,
Marin Co. Oct. 15, 1939.

15375. *Juniperus Covillei*

Lily Lake, Fairfax road, Marin Co.

Oct. 15, 1939.

15376. Juniper

15377. Verbena

Fairfax limits on road to Alpine
Lake, Marin Co., Oct. 15, 1939.

15378. *Stephanomeria virginica*?
Flowers conspicuously large.

15379. *Stephanomeria corniculata*
Flowers smaller. The two
kinds not growing together - about
 $\frac{1}{4}$ - $\frac{1}{2}$ mile apart.

Turlock, Stanislaus Co. Oct. 24-39.

15380. *Chenopodium strictum* Kras.
Tall plants common along highway
becoming purplish-red. 2 to 6 ft. tall.

Nov. 5, 1939.

Salt marsh near Manganita, Marin Co.
15381. *Atriplex hastata*

15382. *Atriplex hastata*

15383. *Atriplex hastata*

The 3 forms of *Atriplex* grew close
together.

Along railroad tracks, Sausalito.

15384. *Rumex scutoides*

15385. *Rumex scutoides* f. *luteus*

15386. *Crociaria salina* var. *major*
Yunker.

15387. *Grindelia camporum*

San Geronimo Ridge in serpentine,
Marin Co. Feb. 25, 1940.

15388. *Pedicularis densiflora* var.
Corolla deep orange - pink except
the lower lip which is white.
Blade of leaves glabrous.

Rocky outcrop on ridge between
Muir Woods and Mill Valley, se.
of Muir Woods, Marin Co.

Mar. 10, 1940.

15389. *Erysimum franciscanum*.

wet soil, Logunitos Meadows,
Marin Co. Mar. 17, 1940.

15390. *Isoetes Nuttallii*

15391. *Lilaea subulata*

San Anselmo Canyon above Fairfax,
Marin Co. Apr. 6, 1940.

15392. *Anemone*

Coral Hollow near DeLoa,
Alameda Co. Apr. 7, 1940.

15393. *Erodium macrophyllum*

^{middle}
Canyon n. of Coral Hollow at
Alameda - San Joaquin Co. line,
Apr. 7, 1940.

15394. *Salvia carduacea*

15395. *Phacelia ciliata*

grassy slope on ridge south of
cascade of San Anselmo Creek,
Marin Co. Apr. 14, 1940.

15396. *Plantago lanceolata* ssp. *firma*.

Apr. 21, 1940.

Pine Canyon near "Castle Rock,"
Mt. Diablo, Contra Costa Co.

15397. *Colochortus pulchellus*

Petals fringed + hairy to tip on
inside, crossing each other about
 $\frac{1}{4}$ - $\frac{1}{3}$ below tip (i.e., the tips of
petals not approximate). Bushy
abated slope.

15398. *Helianthella castanea* Greene

15399. *Plestitis*

15400. *Githopais specularioides* Nutt.

15401. *Orobanche uniflora*

15402. *Mimulus noatus* Greene

15403. *Trifolium variegatum* Nutt.

15404. *Lianthes pygmaea*

15405. *Layia heterocarpha* (DC.) H. & A.

15406. *Tilago californica*?

15407. *Calandrinia*

Crosses shorter than calyx, apparently
not opening. Shallow soil on
sandstone shale. Apr. 21, 1940.

15408. *Avena barbata* Brot.

Lone Mt., San Francisco

May 11, 1940.

15409. *Avena fatua* L.

Lone Mt., San Francisco

May 11, 1940.

May 12, 1940.

Woods south of Lagunitas (Station)
Marin Co.

15410. *Pyrrola aphylla*

West end of San Geronimo Ridge
above mouth of Big Caron Creek,
Marin Co.

15411. *Cirsium heterophyllum*

In anthesis corollas spreading, white
becoming pinkish.

15412. *Crypsanthella Toneyana colistogae*

Canyon of Lagunitas Creek between
Big & Little Caron creeks, Marin Co.

15413. *Aconitum Grayi*

15414. *Allocarya*

15415. *Equisetum arvense*

Rather common in wet places.

May 12, 1940.

15416. *Equisetum maximum*

Occasional leafy stems bearing strobili.

15417. *Mimulus*

Lower lip of corolla with brown eye.
Calyx sharply carinate, lower teeth up-turned.

15418. *Roridomyces*

15419. *Amelanchier*

15420. *Godetia amara*

Buds drooping.

15421. *Heterocodon*

15422. *Pyrola aphylla*

15423. *Lathyrus Bolanderi*

May 12, 1940.

"Chianti country" between Little
Caron and Caron Ridge, Minn.

15424. *Lathyrus Torreyi*

Herbage fragrant in drying.

15425. *Strophostyles umbellata*,

On serpentine. Flowers dark
purple, decidedly scented.

15426. *Vicia exigua*

15427. *Stipa lepida*

15428. *Apiastrum angustifolium*

15429. *Thelypodium esculentum*

15430. *Melica Torreyana*

15431. *Silene aubertii*

15431A. *Cryptantha Torreyana Colistogon*

May 12, 1940.

South end of Caram Ridge east
of Little Caram Falls, Marin Co.

15432. *Mertensia eximia*

Serpentine area. Corolla bright pink

15433. *Convolvulus*

With spreading.

15434. *Ceanothus Jepseni*

Low bushes about 1 ft. high. Horns
wrinkled & variously cleft on sides.

15435. *Mimulus*

West Fork of San Anselmo Canyon,
Marin Co.

15436. *Delphinium hesperium*

15437. *Habenaria undulosa*

San Anselmo Canyon above Fairfax,
Marin Co. May 12, 1940.

15438. *Trifolium pectatum*

15439. *Lupinus densiflorus*

1: Flowers very pale yellow.

15440. *Phacelia*

collar whitish (no lavender)

1 becoming solid tan.

15440A. *Castilleja*

1 Fairfax, Marin Co. May 12, 1940.

15441. *Convolvulus*

1

15442. *Bromus carinatus*

1

1

1

May 19, 1940.

Napa Valley near Napa, Napa Co

15443. *Cichorium intybus*

Leaves from large basal rosette.

Near Calistoga, Napa Co.

15444. *Phalaris californica*

15445. *Agrostis exarata*.

Along the trail from "Monteal", the
N. B. Livermore place, to the "Cotton
Country" e. of Mt. St. Helena, near
St. Helena Creek, Napa Co.

15446. *Amelanchier subintegra*

In flower. Leaves small subentire

15447. *Amelanchier alnifolia*

In young fruit. Leaves larger +
conspicuously dentate. This form
not so common.

May 19, 1940.

Upper St. Helena Creek s. of
"Monteal" (see preceding), Napa Co.
15448. *Melica Geyeri*.

15449. *Mimulus macranthus*.

Leaves much incised or divided

15450. *Ribes Greenianum*

A few bushes along creek in
shade.

On the headwaters of St. Helena
Creek in the "Cato Country" se.

3 mi. St. Helena, Napa Co.

15451. *Ditillaia Purdyi*

Capsule subglobose, not angled.

15452. *Mimulus Kelloggii*

15453. *Streptanthus glabulosus*

May 19, 1940.

15454. *Mimulus cleistogamous*

The cleistogamous mimulus that brought me here! Discovered two weeks ago by Maxine Wilkes & Paul Chorowith of the Sierra Club Nature Study group while Miss Wilkes was collecting seeds for the collection at the Fong-Morse Seed Laboratory. The little plants grow on a rocky hillside around volcanic boulders & outcrops and are more conspicuous in fruit when theaceous calyx is striped with reddish-purple lines that were the ^{sharply} carinate folds of the calyx in anthesis.

Media rotans was common in the vicinity.

15455. *Streptanthus* = 15453.

Sepals black-purple.

May 19, 1940.

Upper St. Helena Creek n. of
"Monteal", Napa Co.

15456. *Phacelia* ~~retusa~~²³ ~~retusa~~
Corolla open - or tubular -
campanulate at anthesis, the
lobes turning in as the corolla
withers.

15457. *Phacelia*

15458. *Layia elegans*.

15459. *Leianthus dichotomus*

Corolla open in middle of day in
bright hot sun. Mouth of corolla
greenish.

The following were collected from
floats nearby. Rock volcanic ash.

15460. *Calyptridium quadrifolium*

May 19, 1940.

15461. *Mimulus Rattanii* Layneae
15462. *Navarretia subuligera*
15463. *Zygadenus micranthus*
15464. *Scutellaria Bolanderi*.
15465. *Mimulus angustatus*
15466. *Polygonum Parryi*.

On road cut between "Monteal"
& St. Helena Creek in serpentine
eluvial, May 19, 1940.

15467. *Cissinium*

Crofts white. Numerous young
whetle on bank appearing as if
from rootstocks but no branching
seen in specimens dug, though some
appear to have nodes.

May 20, 1940.

Trip with Dr. Pennell to Pt. Reyes

Shale outcrop Fairfax, Marin Co.

15468. *Lupinus formosus*

Stems low & sprawling. Corolla
deep lavender or bluish being violet.

15469. *Agoseris plebeia*.

Leaves glabrous

15470. *Agoseris plebeia*

Leaves pubescent. growing
with the preceding.

15471. *Agoseris biuncialis*

15472. *Juncus phaeocarpus*
var. *paniceus*

May 20, 1940.

Rocky shale outcrop east of
Loganitos (village), Marin Co.

15473. *Phacelia*

Corolla white, becoming sordid,
open-compoundate, the lobes not
much inflexed in withering but
somewhat involute.

Papernill Creek w. of Loganitos,
Marin Co.

15474. *Cicuta Douglasii*

New Toaloma, Marin Co.

15475. *Dipsacus fullonum*

15476. *Dipsacus variegatum*

15477. *Dipsacus micromorphus*

15478. *Stachys*

May 20, 1940.

Near Tocoma, Marin Co.

15479. *Mimulus*

Throat not closed by palate.

15480. *Lupinus densiflorus*

Robust plants with lower stem peduncle-like, bearing at top a whorl-like development of leaves + branches. Flowers pale yellowish to lavender.

15481. *Castilleja*

15482. *Anisacanthia*

Corolla golden yellow without mottling.

Olema, Marin Co.

15483. *Lupinus carnosulus* Greene

Type: — Leaflets too small

May 20, 1940.

Inverness, Marin Co.

15484. *Scrophularia*

The coastal pubescent form, which, according to Dr. Penell, does not occur inland. He did not find it today east of San Andreas Fault.

15485. *Alnus rubra*

15486. *Stachys*

15487. *Ribes Menziesii*

15488. *Rumex occidentalis* var. *procerrimus*

15489. *Plantago*

In salt marsh

May 20, 1940.

Near radio station (Pt. Reyes P. O.),
Pt. Reyes, Marin Co.

15490. *Trifolium amplexicaule*

15491. *Equisetum laevigatum*
(Det. Conrad Morton)

15492. *Stachys*

Cowles rose-pink, mottled.

Marshy place along road not
far north of the point, Pt. Reyes
Peninsula, Marin Co.

15493. *Limnanthes sulphurea*

Cowls clear yellow with veins a
little deeper.

15494. *Radicula curvirostris*

May 20, 1940.

Rocky slopes near lighthouse,
Pt. Reyes, Marin Co.

15495. *Phacelia*

15496. *Fritillaria heracleifolia* var. *tristis*
fruit with broad thin wings.

15497. *Polygonatum californicum*
flowers smaller, fruit smooth or hairy.

15498. *Polygonatum californicum*
flowers larger, fruit hairy.

15499. *Lupinus esculentus*
flowers lavender-blue.

15500. *Delphinium decursum*
+ stolichia not at all united

15501. *Ranunculus californicus*
var. *cuneatus*

May 20, 1940.

Near the lighthouse, Pt. Reyes,
Marin Co.

15502. *Trifolium Mucronae*.

15503. *Calandrinia ciliata* var.

Mucronata

15504. *Trifolium barbigerum*

15505. *Trifolium Willeminii*

15506. *Trifolium merodon*

15507. *Trifolium gracilentum*

15508. *Medicago arabica*

15509. *Lupinus bicolor umbellatus*,
Flowers deep blue

15510. *Thelypodium laciniophyllum*

May 20, 1940.

15511. *Anisocoma*

15512. *Oithocarpus*

15513. *Nemophila*

Crocos with dots & lines or only dots, sometimes nearly white, at other times light blue.

15514. *Stachys*

15515. *Castilleja*

Spikes yellow. Growing with red variety and hybridizing with it.

15516. *Lathyrus Bolanderi*

(Dr. Pennell & I also went to Tiburon where he collected *Castilleja neglecta*.)

Stone Wall near Lake Peláezos,
San Mateo Co. May 23, 1940.

15517. *Nemophila*

15518. *Romanzoffia*

Plant with numerous bulbs in
leaf-axils.

Southern ridge in San Anselmo
Canyon above Fairfax, Marin Co.

May 26, 1940.

15519. *Cirium*

Plant appearing like winter annual
although one small depauperate
seedling was seen that might be in
bloom a year hence if it survives
the summer dryness + heat. Flowers
deep rose-red, the outermost
ones spreading a little.

15520A. *Plantago firma*

15520. *Cirsium*

Plants perennial, probably from underground stems since there is quite a colony of young leaf-rosettes. Flowers creamy-white & somewhat nodid, fading darker, the outermost spreading a little.

15521. *Lupinus microcarpus*

Stems spreading from perennial base. Flowers lavender-blue, fading to brownish early.

15522. *Helphinium hispanicum*.

15523. *Glossodia*

Corolla open-campanulate at anthesis, contrasting in age as it withers.

15524. *Castilleja pallida*

May 26, 1940.

Southern ridge in San Anselmo
Canyon, Marin Co.

15525. *Quercus garryana*.

Steep shrub 5-7 ft. tall
in the chaparral. The only oaks
seen in the vicinity are *Q. mohrii*,
Q. wislizenii and *Q. durata*. Perhaps
this is a sort form of *Q. garryana*.

Little Cannon Falls, Marin Co.

15526. *Hedera*

15527. *Erythroxylum coca* ^{var. *in*} ~~*in*~~

15528. *Othocarpus lithospermoides*

15529. *Arenaria Douglasii*

15530. *Ewartia* sp. possible

15531. *Envolvulus*

May 26, 1940.

15532. *Drymocallis fontana* Entr.

15533. *Lianthes*

15534. *Trofionum albopurpureum*

15535. *Carex mendocinensis*

15536. *Mimulus*

15537. *Carex subbractata*

15538. *Cryptantha*

15539. *Lomatium nudicaule*

15540. *Gilia*

15541. *Cryptantha*

15542. *Gilia*

May 26, 1940.

Little Carson Falls, Marin Co.

15543. *Modia*

Smells like black walnut.

Between Little Carson Falls and
south end of Carson Ridge, Marin Co.

15544. *Lupinus collinus*

15545. *Anemone*.

15546. *Equisetum laevigatum*

15547. *Sinanthus*

lvs white or lavender-mauve.

San Anselmo Canyon above
Fairfax, Marin Co.

15548. *Ribes californicum*.

In granitic sand at top of
Nevada Falls, Mariposa Co.

May 30, 1940.

15549. *Phacelia*

Sandy soil, floor of Yosemite
Valley near Mirror Lake;
Mariposa Co. May 31, 1940.

15550. *Carex Brainerdii*

Gravel from disintegrating granite,
El Capitan Trail west of Ribbon Creek,
Mariposa Co. May 31, 1940.

15551. *Lewisia yosemitana*

Sepals 2, glandular-denticulate,
nearly plane, subtended by 2 ^{bracts} similar
in texture but sharply conicote and
narrower. Petals 7 or 8, denticulate
at apex, united at base $\frac{1}{3}$ length,
light pink above the middle. Stamens
17 or 18. Style branches 4, stigmatic

May 31, 1940.

for whole length on inner side,
 $\frac{1}{2}$ as long as the undivided part
to nearly as long. Peduncle a
little flattened, jointed at very
base. — The leaves form a pretty
gray-green rosette, the petioles
are buried in the gravel.

15552. *Lewisia trifylla*

15553. *Phacelia*

Culms open-compound (\checkmark)
light violet. Hairs staining paper
brownish.

15554. *Hicoria emarginata*

June 1, 1940.

Mirror Lake, Yosemite Valley
Mariposa Co.

15555. *Galium Bolanderi*
angles of stems smooth & glabrous.

15556. *Galium pubens* var. *scabridum*
angles of stems hirsutulous.

15557. *Galium pubens* var. *scabridum*
angles of stem scabrous.
These three galium were growing
together.

15558. *Phacelia* ~~lanceolata~~
Corolla tubular - campanulate, the
lobes erect or a little spreading,
white. Plants perennial but
apparently rather short lived since
none is very large.

June 1, 1940.

Snow Creek Trail in Tenaya
Canyon, ca 5500 ft. elev.,
Mariposa Co.

15559. *Mimulus laciniosus*

15560. *Phacelia*

Similar to No. 15558 but this
with somewhat narrower sepals
and lavender or lavender-tinged
corollas.

15561. *Collomia tricoloria*

Corolla mostly lavender.

var. *scabridum*

15562. *Galium pubescens*, ♀ & ♂
Corolla of ♂ flowers reddish.

15563. *Phacelia* — + ^{vallidula} _{15563A} !

Size of plants & lobing of leaves
variable. Lobes of calyx sometimes
quite oblique & unequal. Stamens

sometimes included, generally a
little exserted.

capillaris

15564. *Juncus* ¹ (*Brachyatlus* (Engelm.) Payson)

In moss on granite slope over which
water trickles.

15565. *Scirpus* *Blanderi*.

With pendulous.

15566. *Kunthia* *hystrix* (Gray) Griseb.

Petals green nectaries.

15567. *Garrya* *Fremontii*

15568. *Thysanocarpus curvipes*

15569. *Amelanchier* *sibirica*

Petals frequently veined with rose.

June 1, 1940.

Near top of zig-zags on Snow Creek Trail, Mariposa Co.

15570. *Quercus chrysolepis*

15571. *Quercus wisconsinica*

These two oaks were shrubby
and about 6-8 ft. tall. They grew
next to each other!

15572. *Carex breweri*

Sand on granite flat west
of Mt. Watkins ridge, Mariposa
Co.

15573. *Lewisia disepala*

In fruit the flower-breaks from
the peduncle, the two sepals
open out like two sheets, the
Corolla at top of ovary break off
near base, allowing the remainder
to blow about over the granite

and disburse seeds.

15574. *Lewisia yosemitana*

Whereas the preceding is now in fruit
this species has scarcely begun to
bloom, only two plants with open
flowers being found.

Near highest part of Mt. Watkins
ridge where snow has just melted,
Mariposa Co.

15575. *Lewisia disepala*

Sepals 2; petals 8, rose-pink;
stamens 12; stigma 4-parted.

Even on this height most of the flowers
were past but two groups of plants
in flower were found, one where the
ground was just thawed, the other
about 25 ft. from a rapidly melting
snow bank.

Snow Creek Trail west of Mt.
Wawona, Mariposa Co. June 1, 1940.

15576. *Arabis repanda*.
Sepals bluish, petals tinged with
reddish brown.

15577. *Nemophila spatulata*

East end of Yosemite Valley between
Happy Isles + Mirror Lake, June 2, 1940

15578. *Carex Wherryi*

15579. *Bromus pacifica*

15580. *Acaena Lemmonii*
In wet shaded place at Devil's
Spring.

June 9, 1940.

Northern part of Tiburon Peninsula,
Marin Co., on slopes above bay.

15581. Nicandra

15582. Lupinus formosus

15583. Phacelia

Crocker lavender, open - compoundate.

15584. Centaurium

15585. Centaurium

The two species of Centaurium were
growing together.

June 29, 30, 1940.

15586. *Asclepias* Kotib

Wet valley flats, Middleton,
Lake Co. June 29, 1940.

15587. *Ceanothus integrifolius* f.

Shrubs 6-8 ft. tall on Cobb Mt.
road from Middleton to Adams
Springs, Lake Co. June 29, 1940.

15587A. *Anemone Douglasii* - Cobb Mt.
Soda Bay, Lake Co.

June 30, 1940.

15588. *Galium Nuttallii*

The ripe juicy fruits violet.

15589. *Styphnolobium californicum*

15589A. *Ptelea crenulata*

15590. *Ammannia coccinea*

15591. *Eriogonum vimineum*

15592. *Agoseris apargioides*?

15593. *Neuroteria atrocylindrus*

15594. *Juncus*

15595. *Spongium eurycaeruleum*

Robust plants 3-4 ft. above water
along margin of Clear Lake.

Between Soda Bay and
Kelseyville, Lake Co.

June 30, 1940.

15596. *Orthocarpus lithospermoides*

15597. *Eryngium aristulatum*.

15598. *Scorzonella procera*.

The following collections
were made on my vacation,
spent this year with the Sierra
Club at their camp at East
Lake, Tulare Co., July 28 - Aug. 12.
Certainly, I would say, the first
"Base Camp Trip" was an over-
whelming success botanically!

Canyon of S. Fork Kings River
between Cedar Grove and
Juniper Meadow, Fresno Co.
July 27, 1940.

15599. *Equisetum hiemale*
californicum
15600. *Cercocarpus intricatus*

Canyon of S. Fork of Kings River
between Juniper Meadow and
mouth of Bubbs Creek, Fresno Co.
July 28, 1940.

July 28, 1940.

15601. *Rhamnus rubra* ssp.

goseintana

15602. *Cornus californica*

15603. *Eriogonum sparganoides*

15604. *Botrychium californicum*

Bubbs Creek zigzags (trail) at east
end of Kings River Canyon, Fresno Co.

15605. *Rubus leucodermis*

15606. *Phoradendron villosum*.

On *Quercus chryssolepis*

15607. *Quercus chryssolepis*

15608. *Metostaphylos Mayi*

15609. *Galium pubens* var.
sabidum

July 28, 1940.

15610. *Zauschneria latifolia*

15611. *Chenopodium fremontii*

15612. *Solidago californica*

15613. *Gayophyllum diffusum*

El. ca. 6200 ft.

A Bubbs Creek Canyon near
mouth of Sphinx Creek, Fresno Co.

15614. *Lupinus Parviflorus*

15615. *Lotus americanus*

15616. *Quercus Kelloggii*

15617. *Cordylanthus rigidus* var.
bevibucusatus

15618. *Rubus nutkana* var.
velutina

15619. *Ceanothus cordulatus*

July 28, 1940.

15620. *Symporicarpus acutus*.

15621. *Ribes Roeglinii*

15622. *Potentilla glandulosa* var.
Wrangelliana.

15623. *Mescuraria californica*

15624. *Gayophytum diffusum*

15625. *Gayophytum diffusum villosum*
Stems and leaves pubescent

15626. *Phacelia ramosissima*

15627. *Ceanothus integerrimus*
var. *californicus*

15628. *Arctostaphylos patula*

15629. *Grapholium microcephalum*

July 28, 1940.

15630. *Gilia gilioides*

15631. *Arabis repanda*.

15632. *Equisetum hiemale*
californicum

15633. *Panicaria elata*

15634. *Equisetum arvense*

15635. *Silene verecunda* var.
platyptala

15636. *Potentilla gracilis* Elmeri.

15637. *Gayophytum lasiospermum*.

15638. *Hieracium albiflorum*

15639. *Holodiscus discolor* var.
microphyllus.

15640. *Habenaria unalascensis*

July 28, 1940.

15641. *Lotus longistylis* var.
nevadensis

15642. *Geranium incisum*

15643. *Lotus oblongifolius* var.
Torreyi.

15644. *Lotus cassiifolius*

15645. *Scirpus microcarpus*

15646. *Artemisia tridentata*

15647. *Ribes nevadense*.

15648. *Sambucus glauca*.

15649. *Eriogonum nudum* var.
deductum.

15650. *Apocynum medium*

15651. *Pterospora andromedea*

July 28, 1940.

15652. *Galium sparsiflorum* ♀

15653. *Galium sparsiflorum* ♂

15654. *Galium pectens* var. *scabidum*
Similar to No. 15609 but lower
and more tufted.

Bubbs Creek Canyon below
Charlotte Creek, Fresno Co.

15655. *Brodiaea elegans*

15656. *Artemisia discolor*?

15657. *Angelica lineariloba*

15658. *Mimulus Tilingii*

15659. *Collomia tinctoria*.

15660. *Oxybaphus occidentalis*

July 28, 1940.

15661. *Eriogonum foliosum*

15662. *Rumex solieriifolius*

15663. *Pellaea compacta*

15664. *Solidago elongata*

15665. *Modia gracilis*

15666. *Erysimum capitatum*

15667. *Cuscuta subincisa*.

15668. *Artemisia discolor*.

15669. *Ihalictium Endleri*.

15670. *Stachys albens julienii*

15671. *Rhamnus rubra yosemitana*

15672. *Lutica holosericea*

15673. *Lilium pardalinum* var.
parviflorum

Bubbs Creek Canyon at Charlotte
Creek, Fresno Co. July 29, 1940.

15674. *Acantholobium camptopodium*

15675. *Lupinus Parishii*

15676. *Aconitum columbianum*

Bubbs Creek Canyon between
Charlotte Creek and Junction Meadow,
Fresno Co., July 29, 1940.

15677. *Gnaphalios marginata*

15678. *Eupatorium occidentale*

15679. *Symplocarpus Parishii*

July 29, 1940.

15680. *Actostrophysos patula* var.

15681. *Artemisia discolor*.

15682. *Stephanomeria terminalis*

15683. *Chrysopsis Bruneri*.

15684. *Artemisia glauca*?

junction Meadow, Fresno Co.

15685. *Botrychium californicum*

15686. *Lilium pardalinum* var.
 p arviflora

15687. *Acer glabrum*

15688. *Eriogonum foliosum*

July 30, 1940.

Rocky dry western slope on
east side of East Lake, Tulare Co.

Asteriscia tridentata common.

15689. *Ribes montigenum*.

15690. *Eriogonum nudum deductum*
Scopigerous + branched forms together

15691. *Erysimum capitatum*

15692. *Asteriscia discolor*.

15693. *Symphoricarpos* Parishii

15694. *Holodiscus discolor* var.
microphyllus.

15695. *Carex Hoodii*

15696. *Salix Lemmoni*.

15697. *Hedwigia Ricardamii*
sep. *viscosa*

July 30, 1940.

15698. *Juncus*

15699. *Holictum Endleri*.

15700. *Holictum sporiflum*.

15701. *Senecio Fremontii* var.
occidentalis

15702. *Sitanion Hystrix*

15703. *Smilacina amplexicaulis*
var. glabra

15704. *Lonicera involucrata*.

15705. *Sambucus racemosa*

15706. *Aquilegia pubescens*

15707. *Aquilegia formosa*
Flowers smaller & redder. This
adjoining growing together.

July 30, 1940.

15708. *Phacelia heterophylla* var.

This seems to be like the plant collected by Mrs. Braderer at Wiley Meadows (?) that was included by Broad in his *Phacelia magellanica* f. *griseophylla*. — This East Lake plant is a perennial, short-lived perhaps, with flowers in subglandular heads, corollas open - compoundite, lavender.

15709. *Stipa occidentalis*

Moist meadows & dry flats at
west end of East Lake, Tulare Co.

15710. *Bromus carinatus linearis*

15711. *Lycopodium Smithii*

15712. *Antennaria rosea*

July 30, 1940.

15713. *Eriogonum Coulteri*

15714. *Antennaria corymbosa*

15715. *Equisetum arvense*

15716. *Geranium incisum*

15716A. " *Radicans*

15717. *Potentilla gracilis* loc. n.

15718. *Gaura macrophyllum*

15719. *Mitella Breweri*.

15720. *Epilobium glandulosum*?

15721. *Stellaria longipes*

15722. *Luzula*

15723. *Penstemon confertus* var.
purple - caeruleus.

July 30, 1940.

15724. *Fragaria virginiana* var.
platyphylla petala

15725. *Stipa Lettermani*.

15726. *Sisyrinchium idahoense*

15727. *Eriogonum luteophyllum*

15728. *Sisyrinchium Elmeri*.

15729. *Pedicularis attolens*

15730. *Helenium Bigelowii*

15731. *Staberaria leucostachys*

15732. *Gentiana holopetala*

15733. *Carum Gaudieri*

15734. *Allium validum*

July 30, 1940.

15735. *Swertzia perennis obtusa*

Flower parts usually in 5's,
occasionally in 4's on same
plant. Petals ^{light} bluish - purple.

15736. *Habenaria sparsiflora*

15737. *Cirsium hummondii*

15738. *Cirsium hummondii*

These two collections seem to represent two youth-forms of the same species - one sessile, the other distinctly caulescent. In each the heads are clustered and the corollas are lavender-pink. Examination of young plants would seem to indicate that the plants only bloom once and are from more or less thickened roots which live several years before the time of blooming is reached.

July 30, 1940.

15739. Carex heteroneura

15740. Carex abrupta

15741. Carex virescens

15742. Carex longirostris

15743. Carex Lemmonii

15744. Carex Kelloggii



1573

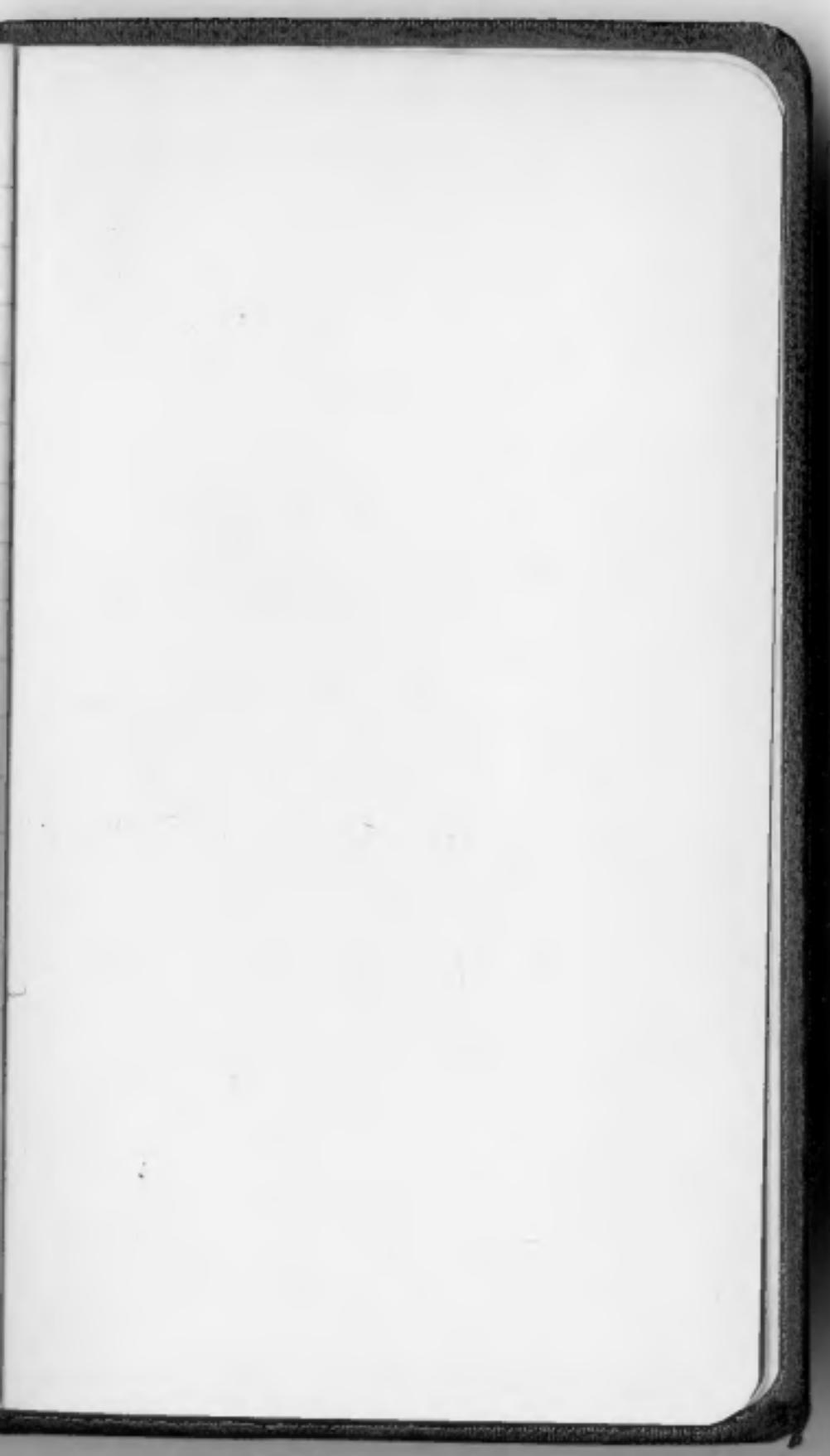
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